



IAEA

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energía Atómica

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Mr. M. Farnitano

ISPO Liaison Officer

U.S. Mission to the International Organizations in
Vienna

Wagramer Str. 17-19

A-1220 Vienna

2004-12-16

Dear Mr. Farnitano,

With reference to the U.S. Support Programme, I am pleased to provide the attached new Junior Professional Officer (JPO) Task Proposal with a copy of the relevant Job Description for your consideration.

The Department of Safeguards would appreciate the nomination of more than one candidate. This will allow the Department to perform an evaluation of candidates that will result in the most suitable candidate being selected for the task. So that this process may proceed on a timely basis I have listed the proposal below along with a closing date for nominations and expected start date. Also in order to facilitate the selection process I would like to ask you to send the candidates' Curriculum Vitae and an Agency Personal History Form with the nomination. Of course all information will be treated as confidential.

SP-1 Number	Title	Expected Start Date	Closing Date f. Nominations
04/TIE-002	Junior Professional Officer – Engineers Support to the Unattended Monitoring (P2)	January 2005	As soon as possible

I will inform you of the result of the evaluation as soon as a decision is made. The final documentation for the successful candidate can then be completed through the Support Programmes Administration and the Division of Personnel.

I would also like to take this opportunity to express the appreciation of the Agency for the valuable contribution provided by your Support Programme to the Agency's safeguards efforts.

Yours sincerely,

N. Khlebnikov

Director

Division of Technical Support

Enclosure

SP-1

TASK PROPOSAL PART

1. Task Proposal

1.1 Task Proposal ID: 04/TIE-002

Date received in SPA: 2004-08-12

1.2 Task Title: Junior Professional Officer (JPO) - Engineers Support to the Unattended Monitoring Systems Unit

1.3 Requester / Division / Section: Aparo / SGTS / TIE

1.4 Is this a CFE task? No

1.5 Task Category: E

1.6 Is this a joint task for MSSPs? No

1.7 Is multiple acceptance required? No

If 1.6 or 1.7 is yes, indicate the reason:

2. Project

2.1 Project ID: SGTS-010

Project Type:

2.2 Project Title: Equipment Standardization, Sustainability and Implementation Support

2.3 Project Manager / Division / Section: Liguori / SGTS / TIE

3. Safeguards Requirement Identification

3.1 What is needed, why and when:

The Unattended Monitoring Systems Unit in SG-TIE has reviewed its resource requirements for the next 36 months, commencing September 2004. This Unit's staff is currently constituted by 5 engineers and 4 technicians. The review of resource requirements shows that the unit is short of manpower and the workload is reaching critical proportions.

Over the next 36 months, the following major goals will be addressed:

- Development finalization, installation and commissioning of UMS equipment for the JNFL Project
- Installation and upgrade of UMS equipment related to installations under the Trilateral Initiative: the K-Area Material Store (KAMS).
- Initiation of the GRAND3 replacement programme with the new MiniGRAND.
- Implementation integration to existing UMS equipment worldwide (current focus is Japan). This initiative requires the installation of a secure LAN for multiple dispersed UMS cabinets in the same facility.
- Installation of UMS in Iran and China
- Installation of Thermohydraulic Power Monitors in various countries (Sweden, The Netherlands, Egypt)
- Installation of fuel flow monitors in Ignalina.
- Installation of UMS equipment for monitoring the transfer and long term dry storage of CANDU fuel.
- Cross training of technicians and engineers.

These activities complement the routine work of supporting the currently installed systems (more than 60 with close to 600 radiation detectors worldwide), which include routine maintenance, performance review, specific inspector training, and documentation.

Due to human resource limitation, the achievement of the goals listed above is not possible.

Either more resources are brought to bear on the UMS area or we will be forced to start dropping efforts. This will have an unacceptable negative impact on the Agency's ability to draw safeguards conclusions. Support could be provided at either the engineer or technician level for our needs.

3.2 How will the task results be used and by whom:

This review has determined that the UMS Unit needs to supplement its staff with one engineer from the Junior Pr

Professional Officers Programme. The selected person will be required to perform the following tasks:

- Provide support to IAEA UMS engineers on assigned tasks as required.
- Repair and replace defective hardware and software in fielded UMS units, and UMS units prior to being shipped to the field.
- Control hardware and software configuration
- Contribute to the technical activities of the unit, including testing, set-up, field implementation, commissioning, maintenance, fault diagnosis, repair and upgrade activities of MiniGRAND, GRAND3, AMSR, JSR-12, and other technologies based UMS.
- Assist in setting up a documentation system consisting of operating manuals, maintenance manuals, training manuals, and hardware and software upgrade documentation.
- Provide initial technical guidance to inspectors in the field to resolve operating problems encountered with the systems.
- Contribute to the production of technical documentation, including
 - Procedures for system and module diagnosis at hardware and software levels
 - Procedures for the system field installations and field maintenance
 - Specifications and requirements for suitable test equipment
 - Requirements for the UMS support infrastructure
- Provide technical guidance in setting up the performance-monitoring program for the systems and guidelines for interpreting system performance and UMS data.
- Participate in duty travel for equipment installation, repair, upgrade and maintenance, as required.

3.3 Consequences if task is not performed:

TIE/UMS shortage of human resources will impact on its ability to fulfil its mission in a timely and effective way. Requests from Operations Divisions for UMS installation and upgrade will not be satisfied. Routine activities like field preventive maintenance will be postponed or limited with unpredictable effects in the long-term system operation and reliability.

This will have an unacceptable negative impact on the Agency's ability to draw safeguards conclusions.

4. IAEA Proposed Work Outline

4.1 Major task stages with timing:

As a resource support to UMS, all support stages and timing are already dictated in the UMS Project Plan.

4.2 Support Division(s) / Section(s): SGTS / TIE

4.3 End User Division(s) / Section(s): SG / ALL

4.4 Estimated duration in months: 12

5. Safeguards Approval Process - not displayed

6. Acceptance by MSSP(s)

6.1 MSSP(s) to which the task is proposed:
USA

Date accepted:

Agency Task ID:

JOB DESCRIPTION FOR PROFESSIONAL POSTS

The following job description should be completed in duplicate and forwarded through your Departmental Administrative Officer to the Division of Personnel when (1) a classification review of an existing post is proposed, (2) a new post is established requiring classification and recruitment action, or (3) the duties of a post have changed significantly. Where there is an incumbent in the post, the description should be completed jointly by the incumbent and immediate supervisor. If the post is vacant, the immediate supervisor should complete the description. Considerable care should be given in completing the job description as it will serve as the primary source of information in evaluating the grade level of the post and in preparing the vacancy notice.

Part I. GENERAL DATA

1. This job description is being submitted for the purpose of:

- a) Requesting a review of the classification
- b) Issuing a vacancy announcement
- c) Redescribing the duties of an existing post
- d) Other (please explain): **Junior Professional Officer (JPO)**

2. Location of post:

- a) Department **Department of Safeguards**
- b) Division **Division of Technical Support**
- c) Section **Section for Installed Equipment**
- d) Unit **Unattended Monitoring Systems Unit**

3. Functional title and current grade of post: **JPO – Unattended Monitoring System Engineer, ~~P2~~ P2**

CCOG code:

4. Present incumbent's name:

Former incumbent's name:

If new post, please indicate
date of establishment:

5. Incumbent's supervisor

- a) Name **C. Liguori**
- b) Functional title **Acting Unit Head, Unit for Unattended Monitoring Systems**
- c) Grade **P4**

6. Date post was last reviewed:

7. List the major changes in the duties of the post which have taken place since the last review. Note that existing posts will not be reviewed for reclassification purposes unless the duties and responsibilities have changed substantially since the current grading of the post was established and appear to be of a lasting nature. For reclassification procedures please refer to AM II/3, paragraphs 31-34.

Not Applicable. This is a new post.



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8. Please show under this item the organizational structure of the Division. This can be done easily by inserting in the blank boxes the appropriate information. The "organizational" chart should show specifically (a) where the post is located in the hierarchy of the Department, (b) who reports to the post holder, (c) to whom the post holder reports.

Department level: DDG-SG

Division level: DIR-SGTS

Section level: SH-SGTIE

Unit level: UH

This position JPO, Unattended
Monitoring System
Engineer

-
9. If applicable, please list characteristic quantitative data relevant to the post. For example, in the case of an Editor, the number of pages edited may be of relevance for determining time spent on a task.

The JPO post holder will contribute considerable expertise and effort to the testing, logistics, preparation, shipment and installation of unattended systems.

10. What are the main purposes (objectives) of the post? (Overall role/functions of the post with stress being placed on the more important aspects.)

The JPO post holder will contribute to the testing, preparation and implementation of unattended systems for IAEA safeguards equipment. Working with other unit staff members he will:

- Support the testing of new systems/components
- Support the maintenance of defective hardware and software in fielded UMS units and UMS units prior to being shipped to the field.
- Control hardware and software configuration
- Assist in setting up a documentation system consisting of operating manuals, maintenance manuals, training manuals, and hardware and software upgrade documentation.

Part II. JOB DESCRIPTION

Guidelines for Preparation:

This form is intended to obtain information about the job and not about the individual who may occupy the job, although it may be difficult to separate the job from the incumbent. Supervisors should ensure that the form describes the characteristics of the job that needs to be done and not the characteristics of the person doing the job. It is suggested that the description of each major duty begin with an action verb.

READ THROUGH THE ENTIRE FORM BEFORE STARTING TO COMPLETE IT

1. Summarize the major duties and responsibilities of the position in order of importance and indicate in the margin the percentage of time spent on each (most jobs contain no more than 5 or 6 major responsibilities). First state what is being done, then how it is being done.

% of time: Duty/responsibility:

20	Testing of new systems/components
20	Testing of safeguards equipment systems and components prior to deployment in the field
10	Support the maintenance of defective hardware and software in fielded UMS units and UMS units prior to being shipped to the field.
10	Control hardware and software configuration
10	Preparing and undertaking field implementation.
10	Control hardware and software configuration
20	Assist in setting up a documentation system consisting of operating manuals, maintenance manuals, training manuals, and hardware and software upgrade documentation.

2. What are the minimum knowledge requirements of the job? (These need not be equivalent to those of the present incumbent.)

Level and field of study of university degree (or the equivalent acquired through training or self-study)

**Computer Engineering/
Electrical/Electronic Engineering /
Nuclear Engineering/
Physical Science**

Minimum length and type of practical experience required:

- at national level
- at international level

2 1/2 Years

Language(s):

- proficiency required
- other languages preferred

**English
German, French, Russian or Spanish**

3. Work Role: What does the job require the incumbent to do (i.e. describe the analysis, interpretation, adaptation, innovation, planning, co-ordination, and directing that the job requires)?

The post holder must be able to undertake engineering tasks in the area of testing, preparation for installation, installation, hardware/software control and

documentation preparation. He/she must also liaise with operations divisions to determine implementation requirements, assist in the field as necessary and to provide technical support during equipment system testing and implementation. He/she will also write clear and concise technical specifications, test reports and procedures.

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4. What subject matter (diversity of work) does the job cover and what is the depth of treatment of the subject matter?

Unattended instrumentation for safeguards monitoring.

5. Describe the control exercised or guidance given by the supervisor in terms of planning, controlling and reviewing the incumbent's work, e.g. how often do you meet, how are priorities handled, how is work achieved, how are instructions given.

Working directly under the Unit Head, Unit for Unattended Monitoring Systems, the post holder will be required to support testing, implementation, maintenance and documentation of Unattended Monitoring Systems. The post-holder will also to participate in the evaluation and testing of new equipment.

6. Indicate which regulations, manuals, precedents, policies, or other administrative and technical guidelines apply to the incumbent's work, and to what extent the incumbent is permitted to interpret, deviate from, or establish new guidelines:

SG-TED-01, and in particular SG-TED-14 (ref. <http://sgintranet.iaea.org/>) and Essential User Requirements for Unattended Monitoring Systems.

7. With whom (indicate title only), for what purpose, and how often is the incumbent required to have contacts in the job? (Describe the most typical, not the most unusual, contacts, e.g. to obtain information, to seek funding, to commit the Agency on)

	<u>Person(s) title</u>	<u>Purpose</u>	<u>How often?</u>
Inside the IAEA	UH-SGTIE/UMS	Receive general instructions.	Daily
		Provide implementation documentation and technical feedback.	
	Professional Staff within the unit	Work closely with, and provide support in the areas of unattended monitoring systems.	Daily
	SGOA, B & C	Provide field support	Daily

Outside the IAEA

8. Describe the most important type(s) of decisions the incumbent is authorized to take and why these are important:

Decide on the results of equipment testing. Successful testing will lead to equipment implementation.

9. Describe the most important types of proposals expected of the incumbent in the job and why these are important:

Based on the results of equipment testing, propose implementation solutions that will best meet those needs in an efficient and cost-effective manner.

10. Describe the most damaging involuntary error(s) that could be made in the work and the effect(s) that would result:

Badly installed, insufficiently tested or unreliable inspection equipment may undermine seriously the Agency's credibility with States and facility operators and the Agency's performance in carrying out its role in international safeguards.

11. Total staff in organizational units supervised by incumbent. (Note: "supervised" means "held accountable for the work.") This is the only factor that is not applicable to all posts.

Professional and higher level staff
Grade level number

Technical and administrative support staff
Grade level number

This is an accurate and complete description of the details of the job.

Incumbent Date

Printed name:

Division Director

Date

Printed name: N. Khlebnikov

Immediate
Supervisor

Printed Name: C. Liguori

Administrative
Officer

Printed Name: A. Baute-Wiles

Date

Date